



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

mm

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,140	09/22/2003	Naoki Mochizuki	Q77096	5800

23373 7590 03/23/2007
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

ADAMS, CHARLES D

ART UNIT	PAPER NUMBER
----------	--------------

2164

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/665,140		MOCHIZUKI, NAOKI	
	Examiner		Art Unit	
	Charles D. Adams		2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. In response to communications filed on 8 January 2007, claims 8 and 9 are amended, and claims 13 and 14 are added per applicant's request. Claims 1-14 are pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Akagi (US Patent 6,931,421).

As to claim 1, Akagi teaches:

A local database for storing and managing said examinational information data (see Figure 1 and 4:74-50); and

Comparing means for comparing examinational information data newly read from said server and examinational information data that have already been stored in said local database with each other, and storing the newly read examinational information data into said local database only when the newly read examinational information data

Art Unit: 2164

have not been stored in said local database (see 5:45-49. The server is element 10 in Figure 1. The local database is contained in element 20, the radiographic apparatus).

As to claim 2, Akagi teaches:

Periodically data reading means for periodically reading said examinational information data from said server (see 5:15-19).

As to claim 3, Akagi teaches:

List displaying means for displaying, on a display unit, a list of examinational information that is produced by merging examinational information data newly read from said server and examinational information data that have already been stored in said local database (see 4:51-53 and Figure 2).

As to claim 4, refer to the rejection of claim 3 above.

As to claim 5, Akagi teaches:

A local database for storing and managing said examinational information data (see 4:74-50); and

Comparing means for comparing examinational information data newly read from said server and examinational information data that have already been stored in said local database with each other, and storing the newly read examinational information

data into said local database only when the newly read examinational information data have not been stored (see 5:45-49).

As to claim 14, Akagi teaches wherein as a result of the comparison in the comparing means, the comparing means stores the newly read examinational information data into said local data base upon determining that the newly read examinational information have not been previously stored in said local database (see 5:45-49. The server is element 10 in Figure 1. The local database is contained in element 20, the radiographic apparatus).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-7 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akagi (US Patent 6,931,421) in view of Tipirneni (US Pre-Grant Publication 2004/0257608).

As to claim 6, Akagi teaches:

A terminal connected to said communication link for receiving and outputting examinational information data that have been stored in said server when the medical imaging apparatus is used (see 4:40-46); and

Akagi does not teach:

A communication monitoring device connected to said communication link for logging communication data transmitted between said terminal and said server,

Wherein said communication monitoring device transmits the examinational information data to said data processing apparatus when said communication monitoring device detects reception by said terminal of said examinational information data from said server.

Tipirneni teaches:

A communication monitoring device connected to said communication link for logging communication data transmitted between said terminal and said server (see paragraph [0038], Figure 10, step 352),

Wherein said communication monitoring device transmits the examinational information data to said data processing apparatus when said communication monitoring device detects reception by said terminal of said examinational information data from said server (see paragraphs [0038]-[0039] and [0041]. The user at the terminal chooses a patient record (examinational information) to examine after receiving a list of patient records. The WEBSTAR service will transmit the chosen examinational information to the GETPATIENT.ACGI for processing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Akagi by the teaching of Tipirneni, since Tipirneni teaches that "a medical facility may not have the financial resources or patient volume to support a physician on site at all times; the medical facility may be located in a remote location; or a town may not have a sufficient number of physicians available to be located at each medical facility at all times of the day. As such, when a patient requires medical attention, an experienced physician may not be readily available at a particular medical facility. Accordingly, a system is needed which acquires an image of a patient and transmits the image to a remote location for viewing and analysis by an experienced physician (see paragraph [0006]).

As to claim 7, Akagi teaches a system according to claim 5.

A terminal connected to said communication link for receiving and outputting examinational information data that have been stored in said server when the medical imaging apparatus is used (see 4:40-46); and

Akagi does not teach:

A communication monitoring device connected to said communication link for monitoring data communications between said terminal and said server,

Wherein said communication monitoring device sends a command to said server to copy predetermined data included in the examinational information data stored in said server to said local database when data communications between said terminal and said server are detected.

Tipirneni teaches:

A communication monitoring device connected to said communication link for monitoring data communications between said terminal and said server (see paragraph [0038]),

Wherein said communication monitoring device sends a command to said server to copy predetermined data included in the examinational information data stored in said server to said local database when data communications between said terminal and said server are detected (see paragraph [0041]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Akagi by the teaching of Tipirneni, since Tipirneni teaches that "a medical facility may not have the financial resources or patient volume to support a physician on site at all times; the medical facility may be located in a remote location; or a town may not have a sufficient number of physicians available to be located at each medical facility at all times of the day. As such, when a patient requires medical attention, an experienced physician may not be readily available at a particular medical facility. Accordingly, a system is needed which acquires an image of a patient and transmits the image to a remote location for viewing and analysis by an experienced physician (see paragraph [0006]).

As to claim 11, Akagi as modified teaches wherein the communication monitoring device is connected to the server via the communication link (see Akagi 4:35-46 and Figure 1).

As to claim 12, Akagi as modified teaches wherein a log of data transmitted between the server and the terminal becomes transmitted to the comparing means of the data processing apparatus (see Akagi 5:44-49. A log of data transmitted between the server and the terminal (the patient list) is sent to the comparison means), and wherein the data processing apparatus stores the examinational information data into said local database only when the newly read examinational information data from said log have not been previously stored (see Akagi 5:44-49).

As to claim 13, Akagi as modified teaches wherein the log of data includes examinational information comprising at least one of a patient's acceptance number, patient name; patient ID, examination department, and imaging technician (see Akagi 6:35-38 and Figures 4(a)-4(c)).

6. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akagi (US Patent 6,931,421) in view of White et al. (US Pre-Grant Publication 2004/0019501).

As to claim 8, Akagi teaches the system of claim 5.

Akagi does not teach wherein the medical imaging apparatus sends an end imaging signal to the server, and when the server receives the end imaging signal, the server automatically deletes examinational information data for a corresponding image.

White et al. teaches wherein the medical imaging apparatus sends an end imaging signal to the server, and when the server receives the end imaging signal, the server automatically deletes examinational information data for a corresponding image (see paragraphs [0057]-[0059]. The radiologist can return a report to a transcriptionist, in which case it is deleted from the radiologist's queue. This can be an "end imaging signal", as the radiologist may be done "reviewing the test film" (see paragraph [0057])).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Akagi by the teaching of White et al., since White et al. teaches that "the system is most advantageously applied in the context of a medical testing process that involves a series of steps. The system provides special benefits in a clinical context where the clinic is charged with performing diagnostic testing of a large volume of patients, and the steps in the testing process are performed by multiple staff members" (see paragraph [0029]). In addition to this, it would also have been obvious to remove a patient from the "patient list" queue of Akagi once their scheduled imaging is done.

As to claim 9, Akagi as modified teaches wherein said data processing apparatus further comprises a periodic reading means, which reads automatically examinational information data from the server depending on a frequency of forming images performed by the medical imaging apparatus (see 5:15-19 and 5:50-6:2. The period can be set to not update when the frequency of periods when imaging does not occur).

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akagi (US Patent 6,931,421) in view of Banks et al. (US Patent 6,603,494).

As to claim 10, Akagi teaches:

A server for storing and managing examinational information data (see Figure 1, element 10. Also see 4:40-46)

Akagi does not teach for identifying an image obtained by a medical imaging apparatus,

Banks et al. teaches for identifying an image obtained by a medical imaging apparatus (see 15:16-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Akagi by the teaching of Banks et al., since Banks et al. teaches ""technologists particularly benefit from the remote services provided. Technologists can control the imaging device remotely, access information remotely, and store information remotely: In this manner, for example, technologists have scheduling tables and information more readily available" (see 24:47-52).

Akagi as modified teaches:

A data processing apparatus (see Akagi element 20 of Figure 1) for merging data of the image obtained by said medical imaging apparatus and the examinational information data from said server into data in a predetermined format (see Banks et al. 15:16-27), said server and said data processing apparatus being connected to each other by a communication link (see Akagi Figure 1),

Said data processing apparatus comprising:

A local database (see Akagi Figure 1 element 21) for storing and managing said examinational information data; and

Comparing means (see Akagi 5:44-49) for comparing examinational information data newly read from said server and examinational information data that have already been stored in said local database with each other, and storing the newly read examinational information data into said local database only when the newly read examinational information data have not been stored (see Akagi 5:44-49).

Response to Arguments

8. Applicant's arguments filed 6 December 2006 have been fully considered but they are not persuasive.

Applicant argues that the limitations found in the preamble of independent claim 1 deserve patentable weight. However, as pointed on in the Office Action dated 16 September 2006, section 10, the preamble need not be given weight. The preamble, as written, merely recites intended use of various objects of the system. In addition to this, the sentence "said data processing apparatus for merging data of the image obtained by said medical imaging apparatus and the examinational information data from said server into data in a predetermined format" is one that describes an intended use of the data processing apparatus, as the data processing apparatus exists for doing

something. As cited in from MPEP 2106 Section II(C) in the last Office Action, items of intended use do not receive patentable weight.

Applicant argues that the items under MPEP 2106, Section II(C) that recite a conditional "when" should receive patentable weight. This argument is correct, and those arguments are hereby withdrawn.

Applicant argues that Akagi does not teach "only when the newly read examinational information data have not been stored in said local database". This argument is incorrect. As found in Akagi, "when order information in server 10 is judged by the comparison like this to have been changed, the radiographing apparatus 20 updates order information stored in memory 21 in a form of converting into order information read out of server 10". The local information is updated when the information has been changed (the changed information hasn't been transmitted to the local memory yet) Akagi later teaches that it is 'possible' to implement a timed update method. However, as this is only listed as possible, Akagi fully teaches that one could update the database only when newly read examinational information (changed data) haven't been stored in the database.

Applicant argues that Akagi in view of Banks does not teach any merging of examinational information from a server and medical imaging data into a predetermined format. However, the cited portion of Banks, and Figure 6 (referred to in the cited

Art Unit: 2164

portion of Banks), one may see that medical imaging data is displayed in the same interface (merged on the screen) with examinational information data that describes the medical imaging data.

Applicant argues that Akagi in view of White does not teach the deletion of records, noting that "the deletion of records, for example, is provided at the behest of the radiologist rather than by the apparatus". The claim reads "wherein the medical imaging apparatus sends an end imaging signal to the server". The apparatus is still sending an "end imaging signal" to the server, regardless of who or what conditions initiated the signal. .

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles D. Adams whose telephone number is (571) 272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charles Adams
AU2164

cy

Cammy
Primary Examiner
Cam Y. Tuong